```
mysql> CREATE DATABASE xavier;
OK, 1 row affected (0.00 sec)

mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| empo               |
| mysql              |
| performance_schema |
| sys                |
| test               |
+--------------------+
6 rows in set (0.00 sec)

mysql> USE empo;
Database changed
mysql> CREATE TABLE employee
    (
        empno integer PRIMARY KEY,
        ename varchar(20) NOT NULL,
        job varchar(20),
        mgr integer,
        hiredate date,
        sal integer,
        comm decimal(6,2),
        deptno integer
    );
Query OK, 0 rows affected (0.28 sec)

mysql> INSERT INTO employee VALUES(7369,"SMITH","CLERK",7902,"1980-12-17",800,NULL,20);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7499,"ALLEN","SALESMAN",7698,"1980-08-15",1600,300,30);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7521,"WARD","SALESMAN",7698,"1996-03-26",1250,500,30);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7566,"JONES","MANAGER",7839,"1995-10-31",2975,NULL,20);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7654,"MARTIN","SALESMAN",7698,"1998-12-05",1250,1400,30);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7698,"BLAKE","MANAGER",7839,"1992-06-11",2850,NULL,30);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7782,"CLARK","MANAGER",7839,"1993-05-14",2450,NULL,10);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7788,"SCOTT","ANALYST",7566,"1996-03-05",3000,NULL,20);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7839,"KING","PRESIDENT",NULL,"1990-06-09",5000,0,10);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7844,"TURNER","SALESMAN",7698,"1995-06-04",1500,0,30);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7876,"ADAMS","CLERK",7788,"1999-06-04",1100,NULL,20);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7900,"JAMES","CLERK",7698,"2000-06-23",950,NULL,30);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7902,"FORD","ANALYST",7566,"1997-12-05",3000,NULL,20);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO employee VALUES(7934,"MILLER","CLERK",7782,"2000-01-21",1300,NULL,10);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> DESC employee;
+----------+--------------+------+-----+---------+-------+
| Field    | Type         | Null | Key | Default | Extra |
+----------+--------------+------+-----+---------+-------+
| empno    | int(11)      | NO   | PRI | NULL    |       |
| ename    | varchar(20)  | NO   |     | NULL    |       |
| job      | varchar(20)  | YES  |     | NULL    |       |
| mgr      | int(11)      | YES  |     | NULL    |       |
| hiredate | date         | YES  |     | NULL    |       |
| sal      | int(11)      | YES  |     | NULL    |       |
| comm     | decimal(6,2) | YES  |     | NULL    |       |
| deptno   | int(11)      | YES  |     | NULL    |       |
+----------+--------------+------+-----+---------+-------+
8 rows in set (0.00 sec)

mysql> SHOW TABLES;
+----------------+
| Tables_in_empo |
+----------------+
| employee       |
+----------------+
1 row in set (0.00 sec)

mysql> SELECT empno, ename FROM employee;
+-------+--------+
| empno | ename  |
+-------+--------+
|  7369 | SMITH  |
|  7499 | ALLEN  |
|  7521 | WARD   |
|  7566 | JONES  |
|  7654 | MARTIN |
|  7698 | BLAKE  |
|  7782 | CLARK  |
|  7788 | SCOTT  |
|  7839 | KING   |
|  7844 | TURNER |
|  7876 | ADAMS  |
|  7900 | JAMES  |
|  7902 | FORD   |
|  7934 | MILLER |
+-------+--------+
14 rows in set (0.00 sec)

mysql> SELECT empno, ename, sal, job FROM employee;
+-------+--------+------+-----------+
| empno | ename  | sal  | job       |
+-------+--------+------+-----------+
|  7369 | SMITH  |  800 | CLERK     |
|  7499 | ALLEN  | 1600 | SALESMAN  |
|  7521 | WARD   | 1250 | SALESMAN  |
|  7566 | JONES  | 2975 | MANAGER   |
|  7654 | MARTIN | 1250 | SALESMAN  |
|  7698 | BLAKE  | 2850 | MANAGER   |
|  7782 | CLARK  | 2450 | MANAGER   |
|  7788 | SCOTT  | 3000 | ANALYST   |
|  7839 | KING   | 5000 | PRESIDENT |
|  7844 | TURNER | 1500 | SALESMAN  |
|  7876 | ADAMS  | 1100 | CLERK     |
|  7900 | JAMES  |  950 | CLERK     |
|  7902 | FORD   | 3000 | ANALYST   |
|  7934 | MILLER | 1300 | CLERK     |
+-------+--------+------+-----------+
14 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM employee;
+-------+--------+-----------+------+------------+------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+-----------+------+------------+------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1980-08-15 | 1600 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1995-10-31 | 2975 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1996-03-05 | 3000 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1990-06-09 | 5000 |    0.00 |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 2000-06-23 |  950 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1997-12-05 | 3000 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 2000-01-21 | 1300 |    NULL |     10 |
+-------+--------+-----------+------+------------+------+---------+--------+
14 rows in set (0.00 sec)

mysql> SELECT DISTINCT job FROM employee;
+-----------+
| job       |
+-----------+
| CLERK     |
| SALESMAN  |
| MANAGER   |
| ANALYST   |
| PRESIDENT |
+-----------+
5 rows in set (0.00 sec)

mysql> SELECT empno, ename, sal*12 "Annual salary" FROM employee;
+-------+--------+---------------+
| empno | ename  | Annual salary |
+-------+--------+---------------+
|  7369 | SMITH  |          9600 |
|  7499 | ALLEN  |         19200 |
|  7521 | WARD   |         15000 |
|  7566 | JONES  |         35700 |
|  7654 | MARTIN |         15000 |
|  7698 | BLAKE  |         34200 |
|  7782 | CLARK  |         29400 |
|  7788 | SCOTT  |         36000 |
|  7839 | KING   |         60000 |
|  7844 | TURNER |         18000 |
|  7876 | ADAMS  |         13200 |
|  7900 | JAMES  |         11400 |
|  7902 | FORD   |         36000 |
|  7934 | MILLER |         15600 |
+-------+--------+---------------+
14 rows in set (0.00 sec)

mysql> SELECT ename, "Working as", job FROM employee;
+--------+------------+-----------+
| ename  | Working as | job       |
+--------+------------+-----------+
| SMITH  | Working as | CLERK     |
| ALLEN  | Working as | SALESMAN  |
| WARD   | Working as | SALESMAN  |
| JONES  | Working as | MANAGER   |
| MARTIN | Working as | SALESMAN  |
| BLAKE  | Working as | MANAGER   |
| CLARK  | Working as | MANAGER   |
| SCOTT  | Working as | ANALYST   |
| KING   | Working as | PRESIDENT |
| TURNER | Working as | SALESMAN  |
| ADAMS  | Working as | CLERK     |
| JAMES  | Working as | CLERK     |
| FORD   | Working as | ANALYST   |
| MILLER | Working as | CLERK     |
+--------+------------+-----------+
14 rows in set (0.00 sec)
```

```
mysql> SELECT 7+8;
+-----+
| 7+8 |
+-----+
|  15 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT 7+8 FROM employee;
+-----+
| 7+8 |
+-----+
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
|  15 |
+-----+
14 rows in set (0.00 sec)

mysql> SELECT * FROM employee WHERE job="clerk";
+-------+--------+-------+------+------------+------+------+--------+
| empno | ename  | job   | mgr  | hiredate   | sal  | comm | deptno |
+-------+--------+-------+------+------------+------+------+--------+
|  7369 | SMITH  | CLERK | 7902 | 1980-12-17 |  800 | NULL |     20 |
|  7876 | ADAMS  | CLERK | 7788 | 1999-06-04 | 1100 | NULL |     20 |
|  7900 | JAMES  | CLERK | 7698 | 2000-06-23 |  950 | NULL |     30 |
|  7934 | MILLER | CLERK | 7782 | 2000-01-21 | 1300 | NULL |     10 |
+-------+--------+-------+------+------------+------+------+--------+
4 rows in set (0.00 sec)

mysql> SELECT empno, ename, job FROM employee WHERE deptno=20 AND sal>1000;
+-------+-------+---------+
| empno | ename | job     |
+-------+-------+---------+
|  7566 | JONES | MANAGER |
|  7788 | SCOTT | ANALYST |
|  7876 | ADAMS | CLERK   |
|  7902 | FORD  | ANALYST |
+-------+-------+---------+
4 rows in set (0.00 sec)

mysql> SELECT * FROM employee WHERE job="clerk" OR job="manager" OR job="salesman";
+-------+--------+----------+------+------------+------+---------+--------+
| empno | ename  | job      | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+----------+------+------------+------+---------+--------+
|  7369 | SMITH  | CLERK    | 7902 | 1980-12-17 |  800 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN | 7698 | 1980-08-15 | 1600 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |
|  7566 | JONES  | MANAGER  | 7839 | 1995-10-31 | 2975 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER  | 7839 | 1992-06-11 | 2850 |    NULL |     30 |
|  7782 | CLARK  | MANAGER  | 7839 | 1993-05-14 | 2450 |    NULL |     10 |
|  7844 | TURNER | SALESMAN | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK    | 7788 | 1999-06-04 | 1100 |    NULL |     20 |
|  7900 | JAMES  | CLERK    | 7698 | 2000-06-23 |  950 |    NULL |     30 |
|  7934 | MILLER | CLERK    | 7782 | 2000-01-21 | 1300 |    NULL |     10 |
+-------+--------+----------+------+------------+------+---------+--------+
11 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM employee WHERE job in ("clerk", "manager", "salesman");
+-------+--------+----------+------+------------+------+---------+--------+
| empno | ename  | job      | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+----------+------+------------+------+---------+--------+
|  7369 | SMITH  | CLERK    | 7902 | 1980-12-17 |  800 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN | 7698 | 1980-08-15 | 1600 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |
|  7566 | JONES  | MANAGER  | 7839 | 1995-10-31 | 2975 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER  | 7839 | 1992-06-11 | 2850 |    NULL |     30 |
|  7782 | CLARK  | MANAGER  | 7839 | 1993-05-14 | 2450 |    NULL |     10 |
|  7844 | TURNER | SALESMAN | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK    | 7788 | 1999-06-04 | 1100 |    NULL |     20 |
|  7900 | JAMES  | CLERK    | 7698 | 2000-06-23 |  950 |    NULL |     30 |
|  7934 | MILLER | CLERK    | 7782 | 2000-01-21 | 1300 |    NULL |     10 |
+-------+--------+----------+------+------------+------+---------+--------+
11 rows in set (0.00 sec)

mysql> SELECT * FROM employee WHERE job not in ("Clerk", "manager", "Salesman");
+-------+-------+-----------+------+------------+------+------+--------+
| empno | ename | job       | mgr  | hiredate   | sal  | comm | deptno |
+-------+-------+-----------+------+------------+------+------+--------+
|  7788 | SCOTT | ANALYST   | 7566 | 1996-03-05 | 3000 | NULL |     20 |
|  7839 | KING  | PRESIDENT | NULL | 1990-06-09 | 5000 | 0.00 |     10 |
|  7902 | FORD  | ANALYST   | 7566 | 1997-12-05 | 3000 | NULL |     20 |
+-------+-------+-----------+------+------------+------+------+--------+
3 rows in set (0.00 sec)

mysql> SELECT empno, ename, sal FROM employee WHERE sal ⩾ 1000 AND sal ⩽ 2000;
+-------+--------+------+
| empno | ename  | sal  |
+-------+--------+------+
|  7499 | ALLEN  | 1600 |
|  7521 | WARD   | 1250 |
|  7654 | MARTIN | 1250 |
|  7844 | TURNER | 1500 |
|  7876 | ADAMS  | 1100 |
|  7934 | MILLER | 1300 |
+-------+--------+------+
6 rows in set (0.00 sec)

mysql> SELECT empno, ename, sal FROM employee WHERE sal BETWEEN 1000 AND 2000;
+-------+--------+------+
| empno | ename  | sal  |
+-------+--------+------+
|  7499 | ALLEN  | 1600 |
|  7521 | WARD   | 1250 |
|  7654 | MARTIN | 1250 |
|  7844 | TURNER | 1500 |
|  7876 | ADAMS  | 1100 |
|  7934 | MILLER | 1300 |
+-------+--------+------+
6 rows in set (0.00 sec)

mysql> SELECT empno, sal FROM employee WHERE sal NOT BETWEEN 1000 AND 2000;
+-------+------+
| empno | sal  |
+-------+------+
|  7369 |  800 |
|  7566 | 2975 |
|  7698 | 2850 |
|  7782 | 2450 |
|  7788 | 3000 |
|  7839 | 5000 |
|  7900 |  950 |
|  7902 | 3000 |
+-------+------+
8 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM employee WHERE comm IS NULL;
+-------+--------+----------+------+------------+------+------+--------+
| empno | ename  | job      | mgr  | hiredate   | sal  | comm | deptno |
+-------+--------+----------+------+------------+------+------+--------+
|  7369 | SMITH  | CLERK    | 7902 | 1980-12-17 |  800 | NULL |     20 |
|  7566 | JONES  | MANAGER  | 7839 | 1995-10-31 | 2975 | NULL |     20 |
|  7698 | BLAKE  | MANAGER  | 7839 | 1992-06-11 | 2850 | NULL |     30 |
|  7782 | CLARK  | MANAGER  | 7839 | 1993-05-14 | 2450 | NULL |     10 |
|  7788 | SCOTT  | ANALYST  | 7566 | 1996-03-05 | 3000 | NULL |     20 |
|  7876 | ADAMS  | CLERK    | 7788 | 1999-06-04 | 1100 | NULL |     20 |
|  7900 | JAMES  | CLERK    | 7698 | 2000-06-23 |  950 | NULL |     30 |
|  7902 | FORD   | ANALYST  | 7566 | 1997-12-05 | 3000 | NULL |     20 |
|  7934 | MILLER | CLERK    | 7782 | 2000-01-21 | 1300 | NULL |     10 |
+-------+--------+----------+------+------------+------+------+--------+
9 rows in set (0.00 sec)

mysql> SELECT * FROM employee WHERE comm IS NOT NULL;
+-------+--------+-----------+------+------------+------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+-----------+------+------------+------+---------+--------+
|  7499 | ALLEN  | SALESMAN  | 7698 | 1980-08-15 | 1600 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |
|  7839 | KING   | PRESIDENT | NULL | 1990-06-09 | 5000 |    0.00 |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |
+-------+--------+-----------+------+------------+------+---------+--------+
5 rows in set (0.00 sec)

mysql> SELECT empno, ename FROM employee WHERE ename like "a%";
+-------+-------+
| empno | ename |
+-------+-------+
|  7499 | ALLEN |
|  7876 | ADAMS |
+-------+-------+
2 rows in set (0.00 sec)

mysql> SELECT * FROM employee WHERE ename like "____";
+-------+-------+-----------+------+------------+------+--------+--------+
| empno | ename | job       | mgr  | hiredate   | sal  | comm   | deptno |
+-------+-------+-----------+------+------------+------+--------+--------+
|  7521 | WARD  | SALESMAN  | 7698 | 1996-03-26 | 1250 | 500.00 |     30 |
|  7839 | KING  | PRESIDENT | NULL | 1990-06-09 | 5000 |   0.00 |     10 |
|  7902 | FORD  | ANALYST   | 7566 | 1997-12-05 | 3000 |   NULL |     20 |
+-------+-------+-----------+------+------------+------+--------+--------+
3 rows in set (0.00 sec)

mysql> SELECT * FROM employee WHERE ename like "%a%";
+-------+--------+-----------+------+------------+------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+-----------+------+------------+------+---------+--------+
|  7499 | ALLEN  | SALESMAN  | 7698 | 1980-08-15 | 1600 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |
|  7876 | ADAMS  | CLERK     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 2000-06-23 |  950 |    NULL |     30 |
+-------+--------+-----------+------+------------+------+---------+--------+
7 rows in set (0.00 sec)

mysql> SELECT empno, ename FROM employee WHERE ename like "__r%";
+-------+--------+
| empno | ename  |
+-------+--------+
|  7521 | WARD   |
|  7654 | MARTIN |
|  7844 | TURNER |
|  7902 | FORD   |
+-------+--------+
4 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM employee WHERE ename not like "%r";
+-------+--------+-----------+------+------------+------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+-----------+------+------------+------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1980-08-15 | 1600 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1995-10-31 | 2975 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1996-03-05 | 3000 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1990-06-09 | 5000 |    0.00 |     10 |
|  7876 | ADAMS  | CLERK     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 2000-06-23 |  950 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1997-12-05 | 3000 |    NULL |     20 |
+-------+--------+-----------+------+------------+------+---------+--------+
12 rows in set (0.00 sec)

mysql> SELECT * FROM employee ORDER BY sal;
+-------+--------+-----------+------+------------+------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+-----------+------+------------+------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 2000-06-23 |  950 |    NULL |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |
|  7521 | WARD   | SALESMAN  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |
|  7934 | MILLER | CLERK     | 7782 | 2000-01-21 | 1300 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1980-08-15 | 1600 |  300.00 |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1995-10-31 | 2975 |    NULL |     20 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1996-03-05 | 3000 |    NULL |     20 |
|  7902 | FORD   | ANALYST   | 7566 | 1997-12-05 | 3000 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1990-06-09 | 5000 |    0.00 |     10 |
+-------+--------+-----------+------+------------+------+---------+--------+
14 rows in set (0.00 sec)

mysql> SELECT empno, ename, hiredate, sal FROM employee WHERE job="salesman" ORDER BY hiredate DESC;
+-------+--------+------------+------+
| empno | ename  | hiredate   | sal  |
+-------+--------+------------+------+
|  7654 | MARTIN | 1998-12-05 | 1250 |
|  7521 | WARD   | 1996-03-26 | 1250 |
|  7844 | TURNER | 1995-06-04 | 1500 |
|  7499 | ALLEN  | 1980-08-15 | 1600 |
+-------+--------+------------+------+
4 rows in set (0.00 sec)

mysql> SELECT sum(sal) FROM employee;
+----------+
| sum(sal) |
+----------+
|    29025 |
+----------+
1 row in set (0.00 sec)

mysql> SELECT avg(comm) FROM employee;
+------------+
| avg(comm)  |
+------------+
| 440.000000 |
+------------+
1 row in set (0.00 sec)

mysql> SELECT min(sal), max(sal) FROM employee;
+----------+----------+
| min(sal) | max(sal) |
+----------+----------+
|      800 |     5000 |
+----------+----------+
1 row in set (0.00 sec)
```

```
mysql> SELECT min(hiredate) FROM employee;
+---------------+
| min(hiredate) |
+---------------+
| 1980-08-15    |
+---------------+
1 row in set (0.00 sec)

mysql> SELECT count(*) FROM employee;
+----------+
| count(*) |
+----------+
|       14 |
+----------+
1 row in set (0.00 sec)

mysql> SELECT count(*) FROM employee WHERE job='salesman';
+----------+
| count(*) |
+----------+
|        4 |
+----------+
1 row in set (0.00 sec)

mysql> SELECT job, count(*) FROM employee GROUP BY job;
+-----------+----------+
| job       | count(*) |
+-----------+----------+
| Clerk     |        4 |
| Salesman  |        4 |
| Manager   |        3 |
| ANALYST   |        2 |
| PRESIDENT |        1 |
+-----------+----------+
5 rows in set (0.00 sec)

mysql> SELECT count(DISTINCT deptno) FROM employee;
+------------------------+
| count(distinct deptno) |
+------------------------+
|                      3 |
+------------------------+
1 row in set (0.00 sec)

mysql> SELECT deptno, sum(sal) FROM employee GROUP BY deptno HAVING count(*)>2;
+--------+----------+
| deptno | sum(sal) |
+--------+----------+
|     20 |    10875 |
|     30 |     9400 |
|     10 |     8750 |
+--------+----------+
3 rows in set (0.00 sec)

mysql> SELECT deptno, count(*) FROM employee GROUP BY deptno HAVING deptno IS NOT NULL;

+--------+----------+
| deptno | count(*) |
+--------+----------+
|     20 |        5 |
|     30 |        6 |
|     10 |        3 |
+--------+----------+
3 rows in set (0.00 sec)

mysql> SELECT deptno, sum(sal) FROM employee GROUP BY deptno;
+--------+----------+
| deptno | sum(sal) |
+--------+----------+
|     20 |    10875 |
|     30 |     9400 |
|     10 |     8750 |
+--------+----------+
3 rows in set (0.00 sec)
```

```
mysql> SELECT deptno, min(sal), max(sal) FROM employee GROUP BY deptno HAVING deptno IS NOT NULL;
+--------+----------+----------+
| deptno | min(sal) | max(sal) |
+--------+----------+----------+
|     20 |      800 |     3000 |
|     30 |      950 |     2850 |
|     10 |     1300 |     5000 |
+--------+----------+----------+
3 rows in set (0.00 sec)

mysql> SELECT job,sum(sal), avg(sal) FROM employee WHERE sal>1000 GROUP BY job HAVING job <>'clerk';
+-----------+----------+-----------+
| job       | sum(sal) | avg(sal)  |
+-----------+----------+-----------+
| salesman  |     5600 | 1400.0000 |
| Manager   |     8275 | 2758.3333 |
| Analyst   |     6000 | 3000.0000 |
| President |     5000 | 5000.0000 |
+-----------+----------+-----------+
4 rows in set (0.10 sec)

mysql> SELECT deptno, count(*) FROM employee WHERE job<>'clerk' GROUP BY deptno HAVING count(*)>2;
+--------+----------+
| deptno | count(*) |
+--------+----------+
|     30 |        5 |
|     20 |        3 |
+--------+----------+
2 rows in set (0.00 sec)

mysql> DELETE FROM employee WHERE deptno IS NULL;
Query OK, 0 rows affected (0.17 sec)

mysql> UPDATE employee SET sal=sal+10/100*sal;
Query OK, 14 rows affected (0.51 sec)
Rows matched: 14  Changed: 14  Warnings: 0


mysql> SELECT * FROM employee;
+-------+--------+-----------+------+------------+------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+-----------+------+------------+------+---------+--------+
|  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  880 |    NULL |     20 |
|  7499 | Allen  | salesman  | 7698 | 1998-08-15 | 1760 |  300.00 |     30 |
|  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1375 |  500.00 |     30 |
|  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 3273 |    NULL |     20 |
|  7654 | Martin | Salesman  | 7839 | 1998-12-05 | 1375 | 1400.00 |     30 |
|  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 3135 |    NULL |     30 |
|  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 2695 |    NULL |     10 |
|  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3300 |    NULL |     20 |
|  7839 | King   | President | NULL | 1990-06-09 | 5500 |    0.00 |     10 |
|  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1650 |    0.00 |     30 |
|  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1210 |    NULL |     20 |
|  7900 | James  | Clerk     | 7698 | 2000-06-23 | 1045 |    NULL |     30 |
|  7902 | Ford   | analyst   | 7566 | 1997-12-05 | 3300 |    NULL |     20 |
|  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 1430 |    NULL |     10 |
+-------+--------+-----------+------+------------+------+---------+--------+
14 rows in set (0.00 sec)

mysql> UPDATE employee SET comm=500 WHERE deptno=30;
Query OK, 5 rows affected (0.30 sec)
Rows matched: 6  Changed: 5  Warnings: 0

mysql> SELECT * FROM employee;
+-------+--------+-----------+------+------------+------+--------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm   | deptno |
+-------+--------+-----------+------+------------+------+--------+--------+
|  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  880 |   NULL |     20 |
|  7499 | Allen  | salesman  | 7698 | 1998-08-15 | 1760 | 500.00 |     30 |
|  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1375 | 500.00 |     30 |
|  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 3273 |   NULL |     20 |
|  7654 | Martin | Salesman  | 7839 | 1998-12-05 | 1375 | 500.00 |     30 |
|  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 3135 | 500.00 |     30 |
|  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 2695 |   NULL |     10 |
|  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3300 |   NULL |     20 |
|  7839 | King   | President | NULL | 1990-06-09 | 5500 |   0.00 |     10 |
|  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1650 | 500.00 |     30 |
|  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1210 |   NULL |     20 |
|  7900 | James  | Clerk     | 7698 | 2000-06-23 | 1045 | 500.00 |     30 |
|  7902 | Ford   | analyst   | 7566 | 1997-12-05 | 3300 |   NULL |     20 |
|  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 1430 |   NULL |     10 |
+-------+--------+-----------+------+------------+------+--------+--------+
14 rows in set (0.00 sec)
```

```
mysql> UPDATE employee SET deptno=30, sal=sal+2000 WHERE deptno=10;
Query OK, 3 rows affected (0.12 sec)
Rows matched: 3  Changed: 3  Warnings: 0

mysql> SELECT * FROM employee;
+-------+--------+-----------+------+------------+------+--------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm   | deptno |
+-------+--------+-----------+------+------------+------+--------+--------+
|  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  880 |   NULL |     20 |
|  7499 | Allen  | salesman  | 7698 | 1998-08-15 | 1760 | 500.00 |     30 |
|  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1375 | 500.00 |     30 |
|  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 3273 |   NULL |     20 |
|  7654 | Martin | Salesman  | 7839 | 1998-12-05 | 1375 | 500.00 |     30 |
|  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 3135 | 500.00 |     30 |
|  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 4695 |   NULL |     30 |
|  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3300 |   NULL |     20 |
|  7839 | King   | President | NULL | 1990-06-09 | 7500 |   0.00 |     30 |
|  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1650 | 500.00 |     30 |
|  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1210 |   NULL |     20 |
|  7900 | James  | Clerk     | 7698 | 2000-06-23 | 1045 | 500.00 |     30 |
|  7902 | Ford   | analyst   | 7566 | 1997-12-05 | 3300 |   NULL |     20 |
|  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 3430 |   NULL |     30 |
+-------+--------+-----------+------+------------+------+--------+--------+
14 rows in set (0.00 sec)

mysql> SELECT* FROM employee, dept;

+-------+--------+-----------+------+------------+------+---------+--------+--------+------------+----------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm    | deptno | deptno | dname      | loc      |
+-------+--------+-----------+------+------------+------+---------+--------+--------+------------+----------+
|  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  800 |    NULL |     20 |     40 | Operations | Boston   |
|  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  800 |    NULL |     20 |     30 | Sales      | Chicago  |
|  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  800 |    NULL |     20 |     20 | Research   | Dallas   |
|  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  800 |    NULL |     20 |     10 | Accounting | New York |
|  7499 | Allen  | Salesman  | 7698 | 1998-08-15 | 1600 |  300.00 |     30 |     40 | Operations | Boston   |
|  7499 | Allen  | Salesman  | 7698 | 1998-08-15 | 1600 |  300.00 |     30 |     30 | Sales      | Chicago  |
|  7499 | Allen  | Salesman  | 7698 | 1998-08-15 | 1600 |  300.00 |     30 |     20 | Research   | Dallas   |
|  7499 | Allen  | Salesman  | 7698 | 1998-08-15 | 1600 |  300.00 |     30 |     10 | Accounting | New York |
|  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |     40 | Operations | Boston   |
|  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |     30 | Sales      | Chicago  |
|  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |     20 | Research   | Dallas   |
|  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |     10 | Accounting | New York |
|  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 2975 |    NULL |     20 |     40 | Operations | Boston   |
|  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 2975 |    NULL |     20 |     30 | Sales      | Chicago  |
|  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 2975 |    NULL |     20 |     20 | Research   | Dallas   |
|  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 2975 |    NULL |     20 |     10 | Accounting | New York |
|  7654 | Martin | Salesman  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |     40 | Operations | Boston   |
|  7654 | Martin | Salesman  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |     30 | Sales      | Chicago  |
|  7654 | Martin | Salesman  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |     20 | Research   | Dallas   |
|  7654 | Martin | Salesman  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |     10 | Accounting | New York |
|  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |     40 | Operations | Boston   |
|  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |     30 | Sales      | Chicago  |
|  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |     20 | Research   | Dallas   |
|  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |     10 | Accounting | New York |
|  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |     40 | Operations | Boston   |
|  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |     30 | Sales      | Chicago  |
|  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |     20 | Research   | Dallas   |
|  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |     10 | Accounting | New York |
|  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3000 |    NULL |     20 |     40 | Operations | Boston   |
|  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3000 |    NULL |     20 |     30 | Sales      | Chicago  |
|  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3000 |    NULL |     20 |     20 | Research   | Dallas   |
|  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3000 |    NULL |     20 |     10 | Accounting | New York |
|  7839 | King   | President | NULL | 1990-06-09 | 5000 |    0.00 |     10 |     40 | Operations | Boston   |
|  7839 | King   | President | NULL | 1990-06-09 | 5000 |    0.00 |     10 |     30 | Sales      | Chicago  |
|  7839 | King   | President | NULL | 1990-06-09 | 5000 |    0.00 |     10 |     20 | Research   | Dallas   |
|  7839 | King   | President | NULL | 1990-06-09 | 5000 |    0.00 |     10 |     10 | Accounting | New York |
|  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |     40 | Operations | Boston   |
|  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |     30 | Sales      | Chicago  |
|  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |     20 | Research   | Dallas   |
|  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |     10 | Accounting | New York |
|  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |     40 | Operations | Boston   |
|  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |     30 | Sales      | Chicago  |
|  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |     20 | Research   | Dallas   |
|  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |     10 | Accounting | New York |
|  7900 | James  | Clerk     | 7698 | 2000-06-23 |  950 |    NULL |     30 |     40 | Operations | Boston   |
|  7900 | James  | Clerk     | 7698 | 2000-06-23 |  950 |    NULL |     30 |     30 | Sales      | Chicago  |
|  7900 | James  | Clerk     | 7698 | 2000-06-23 |  950 |    NULL |     30 |     20 | Research   | Dallas   |
|  7900 | James  | Clerk     | 7698 | 2000-06-23 |  950 |    NULL |     30 |     10 | Accounting | New York |
|  7902 | Ford   | Analyst   | 7566 | 1997-12-05 | 3000 |    NULL |     20 |     40 | Operations | Boston   |
|  7902 | Ford   | Analyst   | 7566 | 1997-12-05 | 3000 |    NULL |     20 |     30 | Sales      | Chicago  |
|  7902 | Ford   | Analyst   | 7566 | 1997-12-05 | 3000 |    NULL |     20 |     20 | Research   | Dallas   |
|  7902 | Ford   | Analyst   | 7566 | 1997-12-05 | 3000 |    NULL |     20 |     10 | Accounting | New York |
|  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 1300 |    NULL |     10 |     40 | Operations | Boston   |
|  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 1300 |    NULL |     10 |     30 | Sales      | Chicago  |
|  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 1300 |    NULL |     10 |     20 | Research   | Dallas   |
|  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 1300 |    NULL |     10 |     10 | Accounting | New York |
+-------+--------+-----------+------+------------+------+---------+--------+--------+------------+----------+
56 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM employee, dept WHERE employee.deptno = dept.deptno;

+-------+--------+-----------+------+------------+------+---------+--------+--------+------------+----------+
| empno | ename  | job       | mgr  | hiredate   | sal  | comm    | deptno | deptno | dname      | loc      |
+-------+--------+-----------+------+------------+------+---------+--------+--------+------------+----------+
|  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  800 |    NULL |     20 |     20 | Research   | Dallas   |
|  7499 | Allen  | Salesman  | 7698 | 1998-08-15 | 1600 |  300.00 |     30 |     30 | Sales      | Chicago  |
|  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |     30 | Sales      | Chicago  |
|  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 2975 |    NULL |     20 |     20 | Research   | Dallas   |
|  7654 | Martin | Salesman  | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |     30 | Sales      | Chicago  |
|  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 2850 |    NULL |     30 |     30 | Sales      | Chicago  |
|  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 2450 |    NULL |     10 |     10 | Accounting | New York |
|  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3000 |    NULL |     20 |     20 | Research   | Dallas   |
|  7839 | King   | President | NULL | 1990-06-09 | 5000 |    0.00 |     10 |     10 | Accounting | New York |
|  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |     30 | Sales      | Chicago  |
|  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1100 |    NULL |     20 |     20 | Research   | Dallas   |
|  7900 | James  | Clerk     | 7698 | 2000-06-23 |  950 |    NULL |     30 |     30 | Sales      | Chicago  |
|  7902 | Ford   | Analyst   | 7566 | 1997-12-05 | 3000 |    NULL |     20 |     20 | Research   | Dallas   |
|  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 1300 |    NULL |     10 |     10 | Accounting | New York |
+-------+--------+-----------+------+------------+------+---------+--------+--------+------------+----------+
14 rows in set (0.00 sec)

mysql> SELECT employee.deptno,empno,ename,dname FROM employee,dept WHERE employee.deptno=dept.deptno AND sal BETWEEN 1000 AND 2000;

+--------+-------+--------+------------+
| deptno | empno | ename  | dname      |
+--------+-------+--------+------------+
|     10 |  7934 | Miller | Accounting |
|     20 |  7876 | Adams  | Research   |
|     30 |  7844 | Turner | Sales      |
|     30 |  7654 | Martin | Sales      |
|     30 |  7521 | Ward   | Sales      |
|     30 |  7499 | Allen  | Sales      |
+--------+-------+--------+------------+
6 rows in set (0.00 sec)

mysql> SELECT employee.* FROM employee,dept WHERE dept.deptno = employee.deptno AND loc='chicago';

+-------+--------+----------+------+------------+------+---------+--------+
| empno | ename  | job      | mgr  | hiredate   | sal  | comm    | deptno |
+-------+--------+----------+------+------------+------+---------+--------+
|  7499 | Allen  | Salesman | 7698 | 1998-08-15 | 1600 |  300.00 |     30 |
|  7521 | Ward   | Salesman | 7698 | 1996-03-26 | 1250 |  500.00 |     30 |
|  7654 | Martin | Salesman | 7698 | 1998-12-05 | 1250 | 1400.00 |     30 |
|  7698 | Blake  | Manager  | 7839 | 1992-06-11 | 2850 |    NULL |     30 |
|  7844 | Turner | Salesman | 7698 | 1995-06-04 | 1500 |    0.00 |     30 |
|  7900 | James  | Clerk    | 7698 | 2000-06-23 |  950 |    NULL |     30 |
+-------+--------+----------+------+------------+------+---------+--------+
6 rows in set (0.00 sec)

mysql> SELECT ename, job, sal, dname FROM employee e, dept d WHERE d.deptno = e.deptno AND comm IS NULL;

+--------+---------+------+------------+
| ename  | job     | sal  | dname      |
+--------+---------+------+------------+
| Miller | Clerk   | 1300 | Accounting |
| Clark  | Manager | 2450 | Accounting |
| Ford   | Analyst | 3000 | Research   |
| Adams  | Clerk   | 1100 | Research   |
| Scott  | Analyst | 3000 | Research   |
| Jones  | Manager | 2975 | Research   |
| Smith  | Clerk   |  800 | Research   |
| James  | Clerk   |  950 | Sales      |
| Blake  | Manager | 2850 | Sales      |
+--------+---------+------+------------+
9 rows in set (0.00 sec)
```

```
mysql>  SELECT * FROM employee NATURAL JOIN dept;
+--------+-------+--------+-----------+------+------------+------+---------+------------+----------+
| deptno | empno | ename  | job       | mgr  | hiredate   | sal  | comm    | dname      | loc      |
+--------+-------+--------+-----------+------+------------+------+---------+------------+----------+
|     20 |  7369 | Smith  | Clerk     | 7902 | 1980-12-17 |  800 |    NULL | Research   | Dallas   |
|     30 |  7499 | Allen  | Salesman  | 7698 | 1998-08-15 | 1600 |  300.00 | Sales      | Chicago  |
|     30 |  7521 | Ward   | Salesman  | 7698 | 1996-03-26 | 1250 |  500.00 | Sales      | Chicago  |
|     20 |  7566 | Jones  | Manager   | 7839 | 1995-10-31 | 2975 |    NULL | Research   | Dallas   |
|     30 |  7654 | Martin | Salesman  | 7698 | 1998-12-05 | 1250 | 1400.00 | Sales      | Chicago  |
|     30 |  7698 | Blake  | Manager   | 7839 | 1992-06-11 | 2850 |    NULL | Sales      | Chicago  |
|     10 |  7782 | Clark  | Manager   | 7839 | 1993-05-14 | 2450 |    NULL | Accounting | New York |
|     20 |  7788 | Scott  | Analyst   | 7566 | 1996-03-05 | 3000 |    NULL | Research   | Dallas   |
|     10 |  7839 | King   | President | NULL | 1990-06-09 | 5000 |    0.00 | Accounting | New York |
|     30 |  7844 | Turner | Salesman  | 7698 | 1995-06-04 | 1500 |    0.00 | Sales      | Chicago  |
|     20 |  7876 | Adams  | Clerk     | 7788 | 1999-06-04 | 1100 |    NULL | Research   | Dallas   |
|     30 |  7900 | James  | Clerk     | 7698 | 2000-06-23 |  950 |    NULL | Sales      | Chicago  |
|     20 |  7902 | Ford   | Analyst   | 7566 | 1997-12-05 | 3000 |    NULL | Research   | Dallas   |
|     10 |  7934 | Miller | Clerk     | 7782 | 2000-01-21 | 1300 |    NULL | Accounting | New York |
+--------+-------+--------+-----------+------+------------+------+---------+------------+----------+
14 rows in set (0.00 sec)
```